



SECTION 306

MODIFIED SUBGRADE

306.1 Description. This work shall consist of modifying a wet subgrade to improve stability prior to paving operations. This work may be performed at the contractor's option and with concurrence of the engineer, within the limits of this specification.

306.2 Material. All material shall conform to Division 1000, Materials Details, and specifically as follows.

306.2.1 The modifying material is specifically limited to hydrated lime, with no substitutes. Hydrated lime shall meet the chemical and physical characteristics of AASHTO M 216. The supplier shall furnish certification to the same for each load. Hydrated lime shall be kept free from moisture prior to use. Lime stored on the project shall be placed in weatherproof bins or buildings with adequate protection from ground dampness.

306.3 Construction Requirements.

306.3.1 Application.

306.3.1.1 The contractor may determine the locations, amount of modifying material and depth of application, within the limits of this specification and subject to the concurrence of the engineer. No lift shall exceed 6 compacted inches (150 compacted millimeters), however there is no limit to the number of lifts that may be modified.

306.3.1.2 Mixing equipment may include disk harrows or rotary mixers, or other equipment which provides uniform mixing and is approved by the engineer.

306.3.1.3 Where subgrade modification is performed, it shall be done to all areas uniformly and laterally between outside shoulder points plus 18 inches (450 mm) on each side. Furthermore, when the modified areas are stopped and started, there shall be a longitudinal transition zone, at the rate of 30 feet per 6 inches (9 m per 150 mm) of modified depth. The transition may be made by reducing modifying material or mixing depth.

306.3.1.4 The modifying material shall be spread in uniform and regular patterns. No material shall be applied if it is being blown from the work area.

306.3.1.5 Hydrated lime shall be applied at a dry rate of not less than 15 pounds per square yard (8 kg/m^2) for the depth modified, nor more than 26 pounds per square yard per 6 inches (13 kg/m^2 per 150 mm) of depth modified.

306.3.2 Compaction. The subgrade shall be uniformly mixed with the modifying material. Mixing and compaction shall continue until the subgrade is shown to have suitable compaction as demonstrated by the roller equipment. Density and moisture testing will ordinarily be waived for subgrade modified under this specification, except that should compaction not be demonstrated to the engineer's satisfaction, the engineer reserves the right to run such tests as necessary to ensure density.

306.4 Method of Measurement.

306.4.1 Measurement will be made to the nearest square yard (square meter) as measured along the centerline of the roadway including transition areas and for the affected width. Subgrade meeting all other requirements, suitable for the placing of base material and having modifying material incorporated as specified herein, will be paid for at the designated price per square yard (square meter) except as noted herein.

306.4.2 Reimbursement for transition areas will be made at the rate of 1/2 the payment for modified subgrade.

306.4.3 Reimbursement will be limited to modified areas, the width of the pavement and shoulders, plus a maximum of 18 inches (450 mm) on each side.

306.4.4 Only one payment for modified subgrade will be made for any area, regardless of the depth of stabilized material, number of applications or other circumstances.

306.5 Basis of Payment. Payment for modified subgrade will be made per square yard (square meter) of modified subgrade at the fixed unit price specified in [Sec 109.14](#), regardless of depth.